

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>DX0686</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/US 97/ 22766</b>	International filing date (day/month/year) <b>12/12/1997</b>	(Earliest) Priority Date (day/month/year) <b>13/12/1996</b>

Applicant

**SCHERING CORPORATION**

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1.  Certain claims were found unsearchable (see Box I).
2.  Unity of invention is lacking (see Box II).
3.  The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing

- filed with the international application.  
 furnished by the applicant separately from the international application.  
 but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.  
 Transcribed by this Authority

4. With regard to the title,  the text is approved as submitted by the applicant  
 the text has been established by this Authority to read as follows:

**MAMMALIAN CELL SURFACE ANTIGENS COMPRISING STRUCTURAL MOTIFS CHARACTERISTIC OF A MEMBER OF THE TNF LIGAND FAMILY**

5. With regard to the abstract,

- the text is approved as submitted by the applicant  
 the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this International Search Report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is:

- Figure No. \_\_\_\_\_  as suggested by the applicant.  
 because the applicant failed to suggest a figure.  
 because this figure better characterizes the invention.
- None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 97/22766

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C12N15/19 C12N15/62 C07K16/24 C07K16/28 C07K14/52  
C07K14/705

According to International Patent Classification(IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C12N C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WONG BR ET AL: "TRANCE is a novel ligand of the tumor necrosis factor receptor family that activates c-Jun N-terminal kinase in T cells." J BIOL CHEM, OCT 3 1997, 272 (40) P25190-4, UNITED STATES, XP002065547 see figure 2 ----	1-7,10
P,X	ANDERSON DM ET AL: "A homologue of the TNF receptor and its ligand enhance T-cell growth and dendritic-cell function." NATURE, NOV 13 1997, 390 (6656) P175-9, ENGLAND, XP002065548 see figure 2 ---- -/-	1-7,10

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

## ° Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

20 May 1998

Date of mailing of the international search report

05/06/1998

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl.  
Fax: (+31-70) 340-3016

Authorized officer

Espen, J

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International Application No

PCT/US 97/22766

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication where appropriate, of the relevant passages	Relevant to claim No.
X	GCG_Geneseq Databasse entry T26135 Accession number T26135; 18 Oct 1996 MATSUBARA K ET AL: 'Human gene signature HUMGS08372' XP002065549 see bp 20 to bp 46 ---	5
X	WILEY S R ET AL: "IDENTIFICATION AND CHARACTERIZATION OF A NEW MEMBER OF THE TNF FAMILY THAT INDUCES APOPTOSIS" IMMUNITY, vol. 3, no. 6, December 1995, pages 673-682, XP000672297 see figures 1,7 ---	5
X	WO 96 31625 A (CYTOGEN CORP ;UNIV NORTH CAROLINA (US)) 10 October 1996 see Fig. 12A, peptide bSH3010 -----	1

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 97/22766

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9631625 A	10-10-1996	AU 5382196 A CA 2217641 A EP 0833941 A	23-10-1996 10-10-1996 08-04-1998